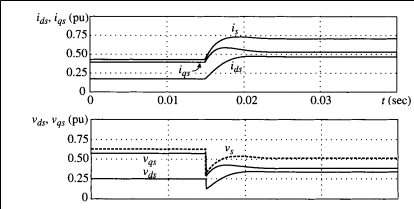
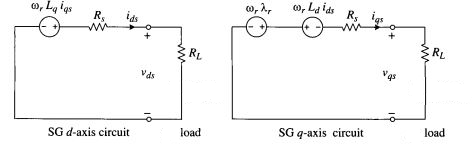
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From the graphs of vds (initial value is estimated to be 0.25 p.u. and final value is almost 0.35 p.u.) and ids (initial value is estimated to be 0.16 p.u. and final value is almost 0.45 p.u.),

From the graphs of vqs (initial value is estimated to be 0.6 p.u. and final value is almost 0.4 p.u.) and iqs (initial value is estimated to be 0.4 p.u. and final value is almost 0.55 p.u.),

Hence ≈1.5 p.u. (6 Ohm)

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Steady-State Analysis of Stand-Alone SG with RL Load.





In this case

iqs=((w\*7.030056\*(6+Rs))/((6+Rs)\*(6+Rs)+w\*w\*Ld\*Lq))= 262.7145

iqs\_pu=iqs/(490\*sqrt(2))= 0.3791 p.u.

ids=((w\*Lq\*iqs)/(Rs+6))= 114.7591

ids\_pu=ids/(490\*sqrt(2))= 0.1656 p.u.